

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 85-89

SITE CLOSURE REQUIREMENTS FOR:

COUNTY OF SONOMA  
SONOMA COUNTY CLASS III SOLID WASTE DISPOSAL SITE  
SONOMA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Sonoma County (hereinafter called the discharger) owns the Sonoma County Class III Solid Waste Disposal Site, a 28 acre landfill formerly leased from Mrs. Rose Cabral. The site is located adjacent to Highway 116, nine road miles east of Petaluma and five road miles southwest of Sonoma. Disposal activity was discontinued on April 8, 1985 upon opening of the Sonoma Transfer Station adjacent to the site.
2. On April 17, 1979, the Board adopted Order No. 79-44 prescribing waste discharge requirements for the site. On July 27, 1981, the discharger was issued Cleanup and Abatement Order No. 81-004 for several violations of Order No. 79-44. Order No. 79-44 states in part as follows:

"B. Leachate and Drainage Specifications

...

1. Leachate from Group 2 wastes (nonhazardous solid waste) and ponded water containing leachates or in contact with refuse shall not be discharged to waters of the state.

...

4. Vertical and lateral hydraulic continuity with usable ground waters shall be prevented by the presence of a soil barrier above the groundwater at least five feet in thickness with the top eighteen inches of soil to be compacted to ninety percent compaction or attain a permeability of  $1 \times 10^{-6}$  cm/s or less or equivalent."

Order No. 81-004 required compliance with the above specifications of Order No. 79-44 by June 1, 1982. The discharger has taken several steps in an attempt to comply with the specifications. These steps include surface and subsurface water diversion systems, dewatering of the the landfill, and construction of a leachate containment pond. The discharger has not demonstrated that these measures provide compliance with the specifications. Compliance with the first specification will be determined by groundwater monitoring implemented by the discharger in response to this Order. Compliance

with the second specification will definitely be achieved when the pond is reconstructed in accordance with specifications contained in this order.

3. The site lies on a moderately steep hillside and is underlain by low permeability clayey silts and silty clays. An unnamed creek borders the site on the east (as shown in Attachment A) and flows into Champlin Creek which is tributary to Sonoma Creek.
4. The discharger submitted final closure plans dated September 29, 1983. The plan includes specifications for the final cover, grading, erosion control, surface and subsurface water diversion systems, and reconstruction of the existing leachate containment pond and construction of additional leachate containment ponds adjacent to the site.
5. The leachate from the Class III landfill is classified as a designated waste and any leachate containment ponds will be classified as Class II surface impoundments.
6. The site, subsequent to any modifications required to comply with this Order, will meet the criteria contained in Title 23, Chapter 3, Subchapter 15 (Subchapter 15) of the California Administrative Code which became effective on November 26, 1984.
7. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on July 21, 1982. This Order implements the water quality objectives stated in the Basin Plan.
8. The beneficial uses of Sonoma Creek are:
  - a. Contact and non-contact water recreation
  - b. Warm and cold fresh water habitat
  - c. Wildlife habitat
  - d. Preservation of rare and endangered species
  - e. Fish migration and spawning
9. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
11. This project involves the closure of a publicly owned Class III landfill with minor alterations to the land. Consequently, this project will not have a significant effect on the environment pursuant to the exemption provided in Section 15101, Title 14 of the California Administrative Code.

IT IS HEREBY ORDERED, that the County of Sonoma, and any other persons who own this site, shall comply with the following:

A. Site Closure Specifications

1. The site shall be closed in accordance with the closure plan cited in Finding 4.
2. No hazardous, designated, or additional nonhazardous solid wastes shall be stored or deposited at this site outside the transfer station.

B. General Specifications

1. Leachate or polluted water from this site shall not be discharged to waters of the State.
2. The site shall be protected from any washout or erosion of wastes or covering material and from inundation which could occur as a result of a 100-year, 24-hour precipitation for the closed Class III landfill or a 1000-year, 24-hour precipitation for the leachate containment ponds.
3. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes deposited on the site.
4. Perimeter drainage ditches and all other facilities shall be designed to convey the 100-year storm runoff and withstand differential settlement.
5. The landfill shall be maintained and the leachate containment ponds shall be constructed to ensure that wastes will be a minimum of 5 feet above the highest anticipated elevation of underlying groundwater.
6. The leachate containment ponds shall be located to comply with criteria and standards under Section 2533 of Subchapter 15. Alternatives to these standards may be granted by the Board based on a demonstration submitted by the discharger pursuant to Sections 2510 (b) and (c) of Subchapter 15.
7. The leachate containment pond shall have a liner or liners according to the specifications and standards under Section 2542 and general construction standards under Section 2541 of Subchapter 15. Alternatives to these standards may be granted by the Board based on a demonstration submitted by the discharger pursuant to Sections 2510 (b) and (c) of Subchapter 15.
8. The leachate containment pond shall contain a minimum of 2 feet of freeboard at all times, and shall meet the criteria contained in Section 2548 of Subchapter 15.
9. The discharger shall assure that the foundation of the site and the structures which control leachate, surface drainage, erosion and gas for this site are maintained under conditions generated during the

maximum probable earthquake for the Class III landfill and the maximum credible earthquake for the Class II units.

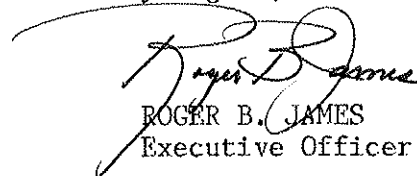
10. The migration of methane gas from the disposal site shall be controlled as necessary to prevent the creation of any nuisance.

C. Provisions

1. The discharger shall comply with all prohibitions, specifications, and provisions of this Order immediately upon adoption, except for Leachate and Drainage Specifications B.1 through B.10. The discharger shall comply with these Specifications in accordance with the following time schedule:
  - a. Submit report demonstrating compliance or submit a plan and time schedule for achieving compliance by November 30, 1985
  - b. Achieve full compliance by June 30, 1986
2. Reports pursuant to compliance with prohibitions, specifications, or provisions relative to Subchapter 15 shall be prepared under the supervision of a registered engineer or certified engineering geologist.
3. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
4. The discharger shall install permanent monuments, establish vegetative cover, and establish post-closure maintenance funding in accordance with the specifications in section 2580 (d), (e), and (f) of Subchapter 15.
5. The discharger shall submit a post-closure maintenance plan for the Class III landfill within 120 days after adoption of this order. This plan is subject to the approval of the executive officer. The maintenance plan shall be updated by October 1st of each year. A report shall be submitted by October 15th of each year to the Board documenting this annual review and indicating what changes were made. The maintenance plan shall include but need not be limited to: a time schedule to inspect the drainage system, the slopes of the closed landfill, and the cover for any erosion or slippage; routine maintenance procedures which will be taken to prevent and stabilize surface slides, control the inflow of water from off-site, control methane migration, control leachate production, and maintain the drainage system, roads, and surveyed monuments; and re-evaluation of the erosion control plan which shall include maintenance measures and time schedules for repair and/or replacement of the final cover and vegetative cover.
6. The discharger shall demonstrate the availability of budgeted funds, and the adequacy of the funds for site maintenance and contingency actions. This demonstration shall be submitted as part of the maintenance and contingency plans by October 15th of each year.

7. The discharger shall submit a contingency plan 120 days after adoption of this Order for approval by the Executive Officer. The contingency plan shall be reviewed and updated by October 1st of each year. A report shall be submitted by October 15th of each year to the Board documenting this annual review and indicating what changes were made. The contingency plan shall include, but shall not be limited to: methods of containment and cleanup of waste exposed or displaced in the event of site failure as a result of and earthquake, excessive rainfall, or other occurrence.
8. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours, or ownership of the disposal area.
9. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
10. The Board considers the property owner or any future owner to have a continuing responsibility for correcting any problems associated with the waste disposed of at the site during subsequent use of the land for other purposes.
11. The discharger shall comply with a self-monitoring program as may be ordered by the Executive Officer.
12. The discharger shall permit the Board:
  - a. Entry upon premises on which wastes are located or in which any required records are kept;
  - b. Access to copy any records required to be kept under terms and conditions of this Order;
  - c. Inspection of monitoring equipment or records; and
  - d. Sampling of any discharge.
13. Order No. 79-44 is hereby rescinded except for Specifications B.1 and B.4 which remain in effect until Cleanup and Abatement Order No. 81-004 is rescinded.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 17, 1985.

  
ROGER B. JAMES  
Executive Officer

Attachment:  
Attachment A

BOUNDARY  
OF LANDFILL

UNDERGROUND  
INTERCEPTOR  
SYSTEM

TRANSFER  
STATION

EXISTING  
LEACHATE  
CONTAINMENT  
POND

LEGEND

 PROPOSED LOCATIONS FOR  
LEACHATE CONTAINMENT PONDS

0 100 200 feet

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ATTACHMENT A  
Sonoma County  
Class III Solid Waste  
Disposal Site

DRAWN BY: LWT DATE: 6-10-85 DRWG. NO.